

**REMARKS**

Claims 1-5, 7-14 and 16-22 are currently pending in the subject application and are presently under consideration.

Favorable reconsideration of the subject patent application is respectfully requested in view of the comments and amendments herein.

**I. Rejection of Claims 1-5, 8, 10-14, 16-18 and 20-22 Under 35 U.S.C. §103(a)**

Claims 1-5, 8, 10-14, 16-18 and 20-22 stand rejected under 35 U.S.C. §103(a) as being unpatentable over US Patent No. 6,950,680 Kela *et al.* (Kela) and further in view of US Patent No. 6,115,616 Halperin *et al.* (Halperin) and US Patent No. 5,537,673 Nagashima *et al.* (Nagashima). Withdrawal of this rejection is requested for at least the following reasons. None of Kela, Halperin, and Nagashima individually or in combination, teaches or suggests all the claim limitations of the subject invention.

Applicants' claimed subject matter relates generally to key pad assemblies, and more particularly to systems and methods that provide for *a top cover and bottom cover being over molded around an entire common boundary there between*, to encapsulate various key pad components. To this end, independent claim 1 recites *A key pad assembly comprising: a top cover placed over a stack of keypad components; a bottom cover placed under the stack; **the top cover and the bottom cover over molded around the stack to form a self contained key pad unit; and an identification component that identifies the key pad to a device that hosts the self contained key pad unit.*** None of Kela, Halperin and Nagashima discloses at least this novel feature.

Kela relates to an electronic device incorporating an electronic display, and a keypad. The Examiner acknowledges that the primary reference, Kela does not teach the claimed invention and provides a secondary reference, Halperin, to compensate for the after mentioned deficiencies of Kela. Halperin relates to hand-held telephone sets and more particularly to wireless and cellular telephone handsets including a keyboard independent from the handset. The Examiner acknowledges that Halperin does not teach the claimed invention and provides a tertiary reference, Nagashima, to compensate for the after mentioned deficiencies of Kela and Halperin. Nagashima relates to a car stereo

having a removable panel attached to a body of car stereo. The panel comprises a cellular telephone system, a battery and a controller for rendering the car stereo inoperative in response to an instruction received through the cellular telephone system; and this reference does not teach the claimed invention.

At page 3 of Office Action, the Examiner erroneously asserts that Nagashima teaches an identification component that identifies the key pad to a device that hosts the self contained key pad unit. The cited portion of Nagashima provides for rendering the car stereo and the telephone operative after the car stereo is restored to the owner due to theft of the car stereo. A predetermined code is inputted which is assigned to each stereo as an identification code and stored in the memory of the system microcomputer. The input code is compared with the code stored in the memory of the system microcomputer. If the codes coincide, telecommunication system of the panel is restored and the operation of the car stereo is restored (*See*, Col. 6, lines 11-23). (*See*, Col. 2, lines 21-30). Hence Nagashima provides for inputting a code by an owner for rendering the car stereo and the telephone operative and the inputted code must be similar to the stored code in the memory of the system microcomputer. More particularly, Nagashima *requires a code input by the owner which must be similar to code stored in the memory to identify the stereo* and does not contemplate *an identification component, within the key pad, that identifies the key pad to a device that hosts the self contained key pad unit*. The identification component, as claimed in the subject matter, facilitates mitigating any code input and provides for *automatic identification* of the self contained key pad to a host unit when the self contained key pad is mounted on the host unit. Thus, the self contained key pad identifies itself to the host unit without requiring any code to be inputted. Accordingly, the host unit is configured to carry different functions simply by changing the stand alone key pad attached thereto. Such modular configuration facilitates increasing a user's operation flexibility when employing a stand alone key pad of the claimed subject matter.

At page 3 and 7 of the Office Action, it is erroneously asserted that Kela teaches *the top cover and the bottom cover of a key pad assembly being over molded around the stack to form a key pad unit*, with respect to independent claim 1 and *the top cover and the bottom cover are over molded to create a sealed common boundary*, with respect to

dependent claim 3, respectively. The cited portion of Kela provides for a display which is mounted on a substrate by a mounting frame to secure the display to the substrate. A number of raised projections protrude from the peripheral edge of the substrate each of which engage in a co-operating recess in the mounting frame. The substrate includes a planar upper surface to receive the key pad adjacent to the display and the planar upper surface has a plurality of apertures therein corresponding to the position of each key (*See*, Fig. 5, Col. 3 line 63- Col. 4 line 9). Hence, Kela provides for a number of raised projections protruding from the peripheral edge of the substrate each of which engage in a co-operating recess in the mounting frame. However Kela does not contemplate *over molding the top cover and the bottom cover of a key pad assembly around the stack to form a key pad unit*. Through this feature, the claimed subject matter facilitates mitigating mechanical over heads like protruding projections associated with holding various key pad components and providing a sealed key pad assembly that mitigates presence of external contaminants in the device. The over molding of the top cover and the bottom cover facilitates a protective seal against outside contaminants and mitigates damage thereto.

In view of the foregoing, it is readily apparent that the subject claims are in condition for allowance, and the rejections of claims 1-5, 8, 10-14, 16-18 and 20-22 should be withdrawn.

## **II. Rejection of Claim 7 Under 35 U.S.C. §103(a)**

Claims 7 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Kela and further in view of Halperin and Nagashima et al. as applied to claim one above, and further in view of US Patent No. 5,841,857 Zoiss et al. (Zoiss). Withdrawal of the rejection is requested for at least the following reason. Claim 7 depends from independent claim 1, and none of Kela, Halperin, Nagashima and Zoiss remedies the aforementioned deficiencies with respect to independent claim 1. Accordingly, this rejection should be withdrawn.

**III. Rejection of Claim 9 Under 35 U.S.C. §103(a)**

Claims 9 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Kela and Halperin as and Nagashima et al. as applied to claim 1 above, and further in view of US Patent No.5,517,683 Collett *et al.* (Collett). Withdrawal of the rejection is requested for at least the following reason. Claim 9 depends from independent claim 1, and none of Kela, Halperin, Nagashima and Collett remedies the aforementioned deficiencies with respect to independent claim 1. Accordingly, this rejection should be withdrawn.

**IV. Rejection of Claim 19 Under 35 U.S.C. §103(a)**

Claims 19 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Kela and Halperin and Nagashima et al. as applied to claim 18 above, and further in view of US Patent No. 6,785,395 Arneson *et al.* (Arneson). Withdrawal of the rejection is requested for at least the following reason. Claim 19 depends from independent claim 16, and none of Kela, Halperin, Nagashima and Collett remedies the aforementioned deficiencies with respect to independent claim 16. Accordingly, this rejection should be withdrawn.

**CONCLUSION**

The present application is believed to be in condition for allowance in view of the above comments and amendments. A prompt action to such end is earnestly solicited.

In the event any fees are due in connection with this document, the Commissioner is authorized to charge those fees to Deposit Account No. 50-1063 [SYMBP192US].

Should the Examiner believe a telephone interview would be helpful to expedite favorable prosecution, the Examiner is invited to contact applicants' undersigned representative at the telephone number below.

Respectfully submitted,

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